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SHIN, KYUNG H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/750,010

Applicant(s)

TAGLIANTI ET AL.

Examiner

Kyung Hye Shin

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4, 6 - 14, 26, 29 - 31, 33 - 39, 50 - 60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 14, 26, 29 - 31, 33 - 39, 50 - 60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/10/08 has been entered.

1. Claims **1 - 4, 6 - 14, 26, 29 - 31, 33 - 39, 50 - 60** are pending. Claims **1, 3, 4, 7, 26, 30, 31, 34** have been amended. Claims **5, 15 - 25, 27, 28, 32, 40 - 49** have been cancelled. Claims **1, 26**, are independent. This application was filed on **12-31-2003**.

Response to Arguments

2. Applicant's arguments filed **11-10-2008** have been fully considered but are moot based on new grounds of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in

section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 6 - 8, 10, 11, 26, 31, 33 - 35, 37, 50, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Xanthos et al.** (US Patent No. **6,928,280**) in view of **Zappala et al.** (US PGPUB No. **20020127993**) and further in view of **Kudrimoti et al.** (US Patent No. **6,751,193**).

Regarding Claim 1, Xanthos discloses a method for measuring latency between a first device and a second device during a user data session, said first and second devices communicating in accordance with a communications specification, said method comprising:

transmitting, during a session between said first and second devices, a message from said second device to said first device, said message being in accordance with said communications specification, said communications specification associated with a mobile network; (Xanthos col 4, ll 3-6: command message (GET command) transmitted between two devices, latency measurement; col 3, ll 60-63: multiple remote devices (first, second device); col 3, ll 55-59: remote units can be mobile and able to roam; or stationary or some combination of mobile and stationary; col 4, ll 37-38: use control links that are either wired or wireless)

during the session receiving a response message from said first device, said response message provided by said communications specification; (Xanthos col 4, ll 3-6: received information based on command message)

computing an elapsed time from transmission of said message to receipt of said response message to determine said latency; (Xanthos col 4, ll 6-8: determination, amount of time to receive response from source)

Xanthos discloses the storage of latency measurement information such as usage data information or records and its placement in a database. (Xanthos col 4, ll 48-53: storage of latency information) Xanthos does not explicitly disclose recording said latency parameter in a data record.

However, Zappala discloses:

recording said latency in the usage data record capable of being stored in a server configure to determine data usage in connection with the user data session. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11: “ ... *By the time the adjustments are made, the network may require different adjustments. In addition, the results of the adjustment are difficult to determine quickly.* ... “; para 005, ll 9-12: “ ... *Because this method does not enable finer*

adjustments to be made, or even to be detected, this method is not helpful in solving network performance problems that are not easily seen or are geographically limited. ...")

Xanthos does not explicitly disclose a mobile network and latency measurements during a user data session. However, Kudrimoti discloses a mobile telephone network. (Kudrimoti col 1, ll 25-33: allows mobile telephone service to be provided to a set of wireless stations or terminals) and discloses: (a) transmitting, during a user data session between said first and second devices, a message; (b) during the user data session receiving a response message; and (c) computing an elapsed time. (Kudrimoti col 3, ll 8-18: receive data from and transmit data to a data source/sink via communications links; controller comprises a TCP/IP and a Radio Link Protocol buffer (mobile communications (telephone); col 3, ll 49-62: latency for data to pass through the RLP buffer; col 4, ll 12-17: latency measured during communications session; allocation of supplemental channels if required) and discloses adding an accounting parameter field to a usage data record associated with the data session, the usage data record provided by the communications specification, wherein the accounting parameter field extends the communications specification; (Kudrimoti col 3, ll 49-51: stored within various parameters (usage information or data records) used to monitor the flow of data through the radio link)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for a mobile telephone network and transmitting a message during a user session, receiving a response during user session, and computing an elapsed time as taught

by Kudrimoti. One of ordinary skill in the art would have been motivated to employ the teachings of Kudrimoti in order for that the latency for a communications link is within a range that is deemed acceptable and the allocated communications channels are being usefully employed.. (Kudrimoti col 4, ll 33-38: “ ... *If the latency is less than the high threshold then the routine continues at block 37 by comparing the latency with the low threshold. If the latency is greater than the low threshold, then this means that the latency is within a range that is deemed acceptable and the allocated channels in the link are being usefully employed. ...* ”)

Regarding Claims 4, 31, Xanthos discloses a method, system in accordance with claims 1, 26, further comprising: transmitting said data containing said latency parameter to said server. (Xanthos col 17, ll 17-24; col 21, ll 13-24: back end processor (application server), post processing of collected data) Xanthos does not explicitly disclose whereby said usage data record. However, Zappala discloses wherein said data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-

12)

Regarding Claims 6, 33, Xanthos discloses a method, system in accordance with claims 1, 26, wherein said first device and said second device are adapted to communicate wirelessly using said communications specification. (Xanthos col 4, ll 11-14: wireless communications between remote units)

Regarding Claims 7, 34, Xanthos discloses a method, system in accordance with claims 1, 26, wherein said first device and said second device are adapted to communicate via a wire-line portion of network using said communications specification. (Xanthos col 4, ll 9-11: communications network wired and wireless portions; col 3, ll 55-59: remote units can be mobile and able to roam; or stationary or some combination of mobile and stationary; col 4, ll 37-38: use control links that are either wired or wireless) Xanthos does not explicitly disclose a mobile telephone network. However, Kudrimoti discloses wherein the mobile telephone network. (Kudrimoti col 1, ll 25-33: allows mobile telephone service to be provided to a set of wireless stations or terminals)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for a mobile telephone network as taught by Kudrimoti. One of ordinary skill in the art would have been motivated to employ the teachings of Kudrimoti in order for that the latency for a communications link is within a range that is deemed acceptable and the allocated communications channels are being usefully employed. (Kudrimoti col 4, ll 33-38)

Regarding Claims 8, 35, Xanthos discloses a method, system in accordance with claims 1, 26, wherein said first device is a mobile station and said second device is a mobility agent. (Xanthos col 3, ll 60-63: multiple remote mobile units (mobile station, mobility agents))

Regarding Claims 10, 37, Xanthos discloses a method, system in accordance with claims 1, 26, wherein said message and said response message are link establishment protocol messages. (Xanthos col 4, ll 37-38: control link type messages processed)

Regarding Claim 11, Xanthos discloses a method in accordance with claim 1, wherein said step of transmitting is performed after said communication session has been established. (Xanthos col 4, ll 3-6: communication session active (established) for latency test (GET data command))

Regarding Claim 26, Xanthos discloses a system for measuring latency during a user session carried out in accordance with a communications specification, said communications specification associated with a mobile network comprising: a first device; and a second device adapted for communicating with said first device in accordance with said communications specification and for transmitting a message to said first device during the session, receiving a response message from said first device during the session, computing an elapsed time from transmission of said message to

receipt of said response message to determine said latency, (Xanthos col 3, ll 60-63: multiple remote devices (first, second devices); col 3, ll 55-59: remote units can be mobile and able to roam; or stationary or some combination of mobile and stationary; col 4, ll 37-38: use control links that are either wired or wireless; col 4, ll 3-8: latency determination (send message, receive response); determination, amount of time to receive response from source)

a server for storing of latency information, the server configured to determine data usage in connection with the user data session; (Xanthos col 4, ll 48-53: storage of latency information)

wherein said message and said response message are provided by said communications specification. (Xanthos col 3, ll 60-63: multiple remote devices (first, second); col 4, ll 3-8: latency determination (send message, receive response); col 4, ll 48-53: storing (recording) latency information)

Xanthos does not explicitly disclose whereby said data record. However, Zappala discloses wherein said data record and recording said latency in an accounting parameter field of a usage data record; (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos as taught by Zappala to enable the capability for the storage of performance information in data records. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and

solving not easily seen problems or geographically limited problems. (Zappala para 004, II 4-11; para 005, II 9-12)

Xanthos does not explicitly disclose latency measurements during a user data session. However, Kudrimoti discloses a mobile telephone network and discloses: (a) transmitting a message to said first device during the user data session; (b) receiving a response message from said first device during the user data session; and (c) computing an elapsed time. (Kudrimoti col 3, II 8-18: receive data from and transmit data to a data source/sink via communications links; controller comprises a TCP/IP and a Radio Link Protocol buffer (mobile communications (telephone); col 3, II 49-62: latency for data to pass through the RLP buffer; col 4, II 12-17: latency measured during communications session; allocation of supplemental channels if required)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for a mobile telephone network and transmitting a message during a user session, receiving a response during user session, and computing an elapsed time as taught by Kudrimoti. One of ordinary skill in the art would have been motivated to employ the teachings of Kudrimoti in order for that the latency for a communications link is within a range that is deemed acceptable and the allocated communications channels are being usefully employed. (Kudrimoti col 4, II 33-38)

Regarding Claim 50, Xanthos discloses the method of claim 1 wherein the first device is a mobile station and the second device is a packet data serving node. (Xanthos col 4, II 25-31: packet data communications; col 3, II 60-63; col 8, II 39-41: remote units

(mobile stations); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times))

Regarding Claim 55, Xanthos discloses the system of claim 26 wherein the first device is a mobile station and the second device is a packet data serving node. (Xanthos col 4, ll 25-31: packet data communications; col 3, ll 60-63; col 8, ll 39-41: remote units (mobile stations); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times; estimated processing time))

5. Claims **2, 3, 9, 12 - 14, 29, 30, 36, 38, 39, 51 - 54, 56 - 60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Xanthos-Zappala-Kudrimoti** and further in view of **Dyck et al.** (US PG PUB No. **20040260831**).

Regarding Claim 2, Xanthos discloses a method in accordance with claim 1. (Xanthos col 3, ll 40-52: performance measurement system; col 4, ll 37-38: operational control link processing) Xanthos does not explicitly disclose whereby said message and said response message are control plane messages. However, Dyck discloses wherein said message and said response message are control plane messages. (Dyck para 014, ll 5-10: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby said message and said response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been

motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7: “...*It is apparent that a need exists for an improved system and method for timing request retransmissions that effect re-registration while minimizing unnecessary transmissions. There is also a need for a system and method to enhance mobile device communications, minimize network loads, and optimize network traffic levels by means of optimized Mobile IP re-registration. ...*”)

Regarding Claim 3, Xanthos discloses a method in accordance with claim 1. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby said message and said response message do not affect data usage of a user. However, Dyck disclose wherein said message and said response message do not affect the data usage of said first device. (Dyck para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby said message and said response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 9, Xanthos discloses a method in accordance with claim 1, wherein

said first device is a remote unit and said second device is a remote unit (mobility agent). (Xanthos col 3, ll 60-63: multiple remote units (implies home agent type units also); col 4, ll 3-6: message communications between remote units) Xanthos does not explicitly disclose whereby a home agent. However, disclose wherein a home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent, mobile unit (mobility agent) communications)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby a home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 12, Xanthos discloses a method in accordance with claim 1, wherein said step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 13, Xanthos discloses a method in accordance with claim 12, wherein said communications specification. (Xanthos col 4, ll 3-6: transmission of request/response message; protocol) Xanthos does not explicitly disclose whereby said timer is provided. However, Dyck discloses wherein said timer is provided. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration time part of registration process (communications specification))

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby said timer is provided as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claims 14, Xanthos discloses a method in accordance with claim 12 wherein said communications specification. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby said timer is not provided, said method further comprising: implementing said timer in said second device, said timer configured to expire during said communication session. However, Dyck discloses wherein said timer is not provided, said method further comprising: implementing said timer in said second device, said timer configured to expire during said communication session. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos

whereby expiration of timer within second device as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 29, Xanthos discloses a system in accordance with claim 26.

(Xanthos col 3, ll 40-52: performance measurement system; col 4, ll 37-38: operational control link processing) Xanthos does not explicitly disclose whereby said message and said response message are control plane messages. However, Dyck discloses wherein said message and said response message are control plane messages. (Dyck para 014, ll 5-10: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby said message and said response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 30, Xanthos discloses a system in accordance with claim 26.

(Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby said message and said response message do not affect a session data usage of a user. However, Dyck disclose wherein said message and said

response message do not affect the data usage of said first device. (Dyck para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby said message and said response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 36, Xanthos discloses a system in accordance with claim 26, wherein said first device is a remote unit and said second device is a remote unit (mobility agent). (Xanthos col 3, ll 60-63: multiple remote units; col 4, ll 3-6: message communications between remote units) Xanthos does not explicitly disclose whereby a home agent. However, disclose wherein a home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent, mobile unit (mobility agent) communications)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby a home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 38, Xanthos discloses a system in accordance with claim 26, wherein said step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 39, Xanthos discloses a system in accordance with claim 38, wherein said communications specification. (Xanthos col 4, ll 3-6: transmission of request/response message; protocol) Xanthos does not explicitly disclose whereby said timer is provided. However, Dyck discloses wherein said timer is provided. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration time part of registration process (communications specification))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for a timer provided as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 51, Xanthos discloses the method of claim 1. Xanthos does not explicitly disclose echo type link control messages. However, Dyck discloses wherein the message from the second device is a Link Control Protocol Echo message and the response message from the first device is a Link Control Protocol Echo Response message. (Dyck para 052, II 1-5; para 056, II 1-8: echo request/response messages)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for echo messages such as echo control link messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, II 1-7)

Regarding Claim 52, Xanthos discloses the method of claim 1 further comprising:

computing an Internet access latency based on said start and stop times.

(Xanthos col 4, II 25-31: packet data communications (packet data server node); col 4, II 3-8: compute latency, compute difference (latency, amount of time required between start and stop times))

Xanthos does not explicitly disclose start, stop times, and registration message transmissions.

However, Dyck discloses:

storing a start time; (Dyck para 013, II 6-9: start time for message)

transmitting, to a home agent, a Mobile IP Registration Request Message; (Dyck para 023, II 1-11; para 046, II 1-5: home agent; para 023, II 1-11; para 052, II 1-5; para 064, II 1-13: registration request/response)

receiving a Mobile IP Registration Reply Message from the home agent; (Dyck para 023, II 1-11; para 046, II 1-5: home agent; para 023, II 1-11; para 052, II 1-5; para 064, II 1-13: registration request/response)

storing a stop time; (Dyck para 013, II 6-9: stop time utilized) and

It would have been obvious to one of ordinary skill in the art to modify Xanthos for processing start, stop times and registration messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, II 1-7)

Regarding Claim 53, Xanthos discloses the method of claim 52 and Internet access latency. (Xanthos col 20, II 13-17: performing measurements such as latency of internet access) Xanthos does not explicitly disclose adjusting said latency. However, Kudrimoti discloses wherein said step of computing said latency further comprises adjusting said latency for a processing time associated with said home agent. (Kudrimoti col 3, II 8-18: receive data from and transmit data to a data source/sink via communications links; controller comprises a TCP/IP and a Radio Link Protocol buffer (mobile communications (telephone, node); col 3, II 49-62: latency for data to pass

through the RLP buffer; col 4, ll 12-17: latency measured during communications session; allocation of supplemental channels if required)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for adjusting said latency as taught by Kudrimoti. One of ordinary skill in the art would have been motivated to employ the teachings of Kudrimoti in order for that the latency for a communications link is within a range that is deemed acceptable and the allocated communications channels are being usefully employed. (Kudrimoti col 4, ll 33-38)

Regarding Claim 54, Xanthos discloses the method of claim 53, wherein said processing time. (Xanthos col 4, ll 25-31: packet data communications (packet data server node); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times)) Xanthos does not explicitly disclose an estimated processing time. However, Dyck discloses an estimated processing time. (Dyck para 013, ll 5-18: initiate a current estimation process; estimated delay is equal to difference between end time of the current estimation process and the start time of the current estimation process)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for an estimated processing time as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 56, Xanthos discloses the system of claim 26 wherein said latency is Internet access latency and a packet data node. (Xanthos col 20, ll 13-17: performing measurements such as latency of internet access; col 4, ll 25-31: packet data communications) Xanthos does not explicitly disclose a home agent. However, Dyck discloses wherein the first device is a home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for a home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 57, Xanthos discloses the system of claim 26. Xanthos does not explicitly disclose echo type link control messages. However, Dyck discloses wherein the message from the second device is a Link Control Protocol Echo message and the response message from the first device is a Link Control Protocol Echo Response message. (Dyck para 052, ll 1-5; para 056, ll 1-8: echo request/response messages)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for echo messages such as echo link control messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 58, Xanthos discloses the system of claim 26 wherein said latency is Internet access latency. (Xanthos col 20, ll 13-17: performing measurements such as latency of internet access) Xanthos does not explicitly disclose registration request/response messages. However, Dyck discloses wherein further the message from the second device is a Mobile Internet Protocol Registration Request message and the response message from the first device is a Mobile Internet Protocol Registration Reply message. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent; para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: registration message processing)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for registration type messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 59, Xanthos discloses the system of claim 58 and Internet access latency. (Xanthos col 20, ll 13-17: performing measurements such as latency of internet access) Xanthos does not explicitly disclose adjusting latency. However, Kudrimoti discloses wherein said second device is a packet data serving node adapted to adjust said latency for a processing time associated with said first device, said first device comprising a home agent. (Kudrimoti col 3, ll 8-18: receive data from and transmit data to a data source/sink via communications links; controller comprises a TCP/IP and a

Radio Link Protocol buffer (mobile communications (telephone, node); col 3, ll 49-62: latency for data to pass through the RLP buffer; col 4, ll 12-17: latency measured during communications session; allocation of supplemental channels if required)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for adjusting latency as taught by Kudrimoti. One of ordinary skill in the art would have been motivated to employ the teachings of Kudrimoti in order for that the latency for a communications link is within a range that is deemed acceptable and the allocated communications channels are being usefully employed. (Kudrimoti col 4, ll 33-38)

Regarding Claim 60, Xanthos discloses the system of claim 59, wherein said processing time. (Xanthos col 4, ll 25-31: packet data communications (packet data server node); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times; estimated processing time)) Xanthos does not explicitly disclose an estimated processing time. However, Dyck discloses an estimated processing time. (Dyck para 013, ll 5-18: initiate a current estimation process; estimated delay is equal to difference between end time of the current estimation process and the start time of the current estimation process)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for an estimated processing time as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung Hye Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia L. Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyung Hye Shin
Examiner
Art Unit 2443

KHS
November 18, 2008

/Tonia LM Dollinger/

Supervisory Patent Examiner, Art Unit 2443